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RN-6905

B. E. - III (Sem. V) (Textile Technology) Examination

May / June – 2010

Fabric Structure - I

Time : **3** Hours] [Total Marks : **100**

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **B. E. - 3 (Sem. 5) (Textile Technology)**

Name of the Subject :

☛ **Fabric Structure-1**

☛Subject Code No. : **6 9 0 5** ☛Section No. (1, 2,.....) : **1&2**

Seat No. :

Student's Signature

(2) Answer to the two sections must be written in separate answer books.
(3) Figures to the right indicate **full** marks.
(4) Tie two sections separatel.

SECTION I

Q1a.) Do as Directed: [05]

i. Cord is the term applied to weft rib. (State True or False).

ii. In the draft number of horizontal places are equal to _____.

iii. 80's reed is _____ than 110's reed.

iv. Ends/inch in reed are more than the fabric. (State True or False).

v. Write the formula to calculate twill angle.

Q1b.) Explain, with suitable diagrams, how (1/1,2/1) twill can be produced with intermediate effect. [05]

Q1c.) Draw Design, Draft & Peg Plan for each of the following: [10]

i. Wavy Twill on (10 x 5)

ii. Broken Twill (endwise broken effect)

Q2a.) Give one design of each honeycomb with equal & unequal cell formation. [05]

Q2b.) Give one design of each of the 27° & 70° twill angle. [05]

Q2c.) Draw **only Designs** for each of the following: [05]

i.Stitched Hopsack

ii.Transposed 6/2 twill on 4 thread sateen order base.

OR

Q2a.) Draw **only Designs** for each of the following: [10]

i.Brighton Honeycomb on 16 x 16

ii.Hopsack & Twill combination on 12 x12

iii.Mockleno

iv.Huck-a-Back

Q2b.) Give one design for each of the regular & irregular warp rib(Draw crosssection also). [05]

Q3 .) Write Short Notes on : (Any three) [15]

i. Relative Firmness of Twill weave

ii. Denting of Plain, Hopsack, Mockleno & Huck-a-back

iii. Rib & Cord effect in Plain Weave(only one method of each)

iv. Importance of Tape length & Heald Count

SECTION II

Q4a.) Do as Directed: [10]

i. Give one point of difference between jeans & denim.

ii. Distorted thread effects is also called as _____.

iii. Name the types of crepe fabrics.

iv. Give the possible move no. for regular satin on 10x 10.

v. Give the function of wadded ends in wadded Welts.

vi. Sponge weave is used for obtaining _____ fabrics.

vii. _____ is a warp faced fabric.

viii. Give two examples of light weight fabric.

ix. Use of set & unset nylon yarns alternately give _____ fabric.

x. Warp Cover factor is influenced by ends/inch and _____.

Q4b.) With the help of necessary designs & cross sections, explain how warp & weft way distortion is done. [10]

Q5a.) Give Design, Draft, Pegplan & cross sections for the following: [10]

- Wadded bedford cord
- Ordinary Welt.

Q5b.) State the rules for constructing irregular sateen. Thus give design, draft & pegplan for irregular sateen on 10 x 10. [05]

OR

Q5a.) Construct a spot effect(having 3 spots in a repeat) on 30 x 30.(given fabric specifications 36epi & 36 ppi). [10]

Q5b.) Give only Design for Waved Piques. [05]

Q6 .) Write Short Notes on : (Any three) [15]

i. Methods of constructing Crepe Weave

ii. Twill & sateen Fabrics.

iii. Diamond & diaper.

iv. Characteristics of sheeting & duck fabrics.